

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)

2. (Original) A coating process apparatus for forming a coating film on a substrate to be processed, comprising:

 a holding mechanism which holds the substrate to be processed in an approximately horizontal posture;

 a coating liquid supply mechanism supplying a predetermined coating liquid to a top surface of the substrate to be processed held by the holding mechanism;

 a rotation mechanism rotating the substrate to be processed held by the holding mechanism; and

 a process container accommodating the holding mechanism and capable of exhausting an atmosphere around the substrate to be processed from a bottom, wherein

 the process container includes:

 a first cup having an outer circumferential wall surrounding an outside of the substrate to be processed, and

 an airflow control member having a cross section of an approximately rectangular shape defined by an upper ring portion having a vertical cross section of an approximately triangular shape and protruding upward, and a lower ring portion having a cross section of an approximately triangular shape and protruding downward, and provided close to a periphery of the substrate to be processed in the first cup so as to surround an outer circumference of the substrate to be processed, wherein

 an exhaust passage substantially exhausting an atmosphere around the substrate to be processed is provided between the airflow control member and the outer circumferential wall of the first cup, and wherein

a space between an apex of the upper ring portion and an upper end of the outer circumferential wall defines an atmosphere extraction port for the exhaust passage.

3. (Original) The coating process apparatus according to claim 2, wherein a base angle of an inside of the upper ring portion of the airflow control member is larger than or equal to 24 degrees, but smaller than or equal to 34 degrees.

4. (Original) The coating process apparatus according to claim 2, wherein a height of the upper ring portion is greater than or equal to 10 mm, but less than or equal to 18 mm.

5. (Original) The coating process apparatus according to claim 2, wherein a base angle of an inside of the lower ring portion included in the airflow control member is larger than or equal to 25 degrees, but smaller than or equal to 35 degrees.

6. (Original) The coating process apparatus according to claim 2, wherein the upper ring portion and the lower ring portion are integrated with each other.

7. (Original) The coating process apparatus according to claim 2, wherein the outer circumferential wall of the first cup includes a cylindrical vertical wall, and an inclined wall connected in a consecutive arrangement to an upper end of the vertical wall and inclined inwardly and upward.

8. (Original) The coating process apparatus according to claim 7, wherein the inclined wall is approximately in parallel with an outer inclined surface of the upper ring portion.

9. (Original) The coating process apparatus according to claim 8, wherein a protrusion for suppressing a counterflow of an airflow flowing into the exhaust passage is provided inwardly of an upper end portion of the inclined wall constituting the outer

circumferential wall of the first cup.

10. (Original) The coating process apparatus according to claim 2, wherein the process container further includes a second cup having an inclined wall expanding obliquely downward and outward from below the substrate to be processed,

a drain passage which drains the coating liquid dispersed from the substrate downward is provided between the airflow control member and the inclined wall of the second cup, and a clearance between the airflow control member and the substrate to be processed defines a drain port of the drain passage.

11. (Original) The coating process apparatus according to claim 10, wherein the second cup further includes a cylindrical vertical wall extending downward from a lower end of the inclined wall thereof, and

the exhaust passage and the drain passage are merged with each other at a clearance formed between the outer circumferential wall of the first cup and the vertical wall of the second cup, and exhausting and draining are carried out through a bottom of the process container.

12. (Original) The coating process apparatus according to claim 10, wherein the airflow control member is laid out in such a way that a vertex defined by mated inner edges of the upper and lower ring portions is higher than a position of the top surface of the substrate to be processed, so that the coating liquid dispersed from the substrate to be processed substantially strikes an inner inclined wall of the lower ring portion to be guided to the drain passage.

13. (Original) The coating process apparatus according to claim 10, wherein the airflow control member is provided in such a way that a vertex defined by mated inner edges of the upper and lower ring portions is higher than a position of the top surface of the substrate to be processed, so that the airflow flowing in a vicinity of the periphery of the substrate to be processed substantially ascends along an inner inclined wall of the

upper ring portion and flow into the exhaust passage via the atmosphere extraction port.

14-17. (Canceled)